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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,011

12/14/2004

Yuuichirou Ogawa

Q85280

4989

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7590

09/13/2006

EXAMINER

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WASHINGTON, DC 20037

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/518,011

Applicant(s)

OGAWA, YUUICHIROU

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/14/04; 6/24/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

1. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 1-3, several steps of the method are described followed by "the method comprising the steps of" and then listing several steps in the following lines, these lines (e.g. "*the* hard core" in line 4) at least in part referencing the steps described at lines 1-3. It however is not entirely clear what the scope of the claimed method includes - it would seem that the steps in the preamble lines 1-3 are part of the claimed method (especially since these steps are referred to in the body of the claim) but clarification of the scope of the claimed method is required. It might be clearer to for example recast the claim in *Jepson* form ("In a method..., the improvement comprising...") to avoid this ambiguity.

In claim 3, the apparatus is described as including "expanding/contracting means" and "moving means" - each of these means is however related to "the hard core" (presumably the "toroidal hard core" referenced at line 3) but it is not clear if this toroidal hard core forms part of the claimed apparatus. Clarification is therefore required of the scope of the claimed apparatus. It will be assumed that the toroidal hard core forms part of the apparatus for purposes of the rejections to follow but clarification is required.

In the last two lines of claim 3, it is not entirely clear what direction is "internal" and "external" - is this for example an axial direction or is this broader?

In line 3 of claim 5, it is not entirely clear what relationship is represented by "outer sides in an axial direction of the bladders" - in particular, it is not clear if this is referring to engaging members (32/34) that are on either side of each bladder or is this referring to for example only the two axially outer members (32). Clarification is required.

In claim 8, lines 3-4, no antecedent has been established for "the driving means".

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Haase (US 2,951,526).

Haase discloses a method and apparatus for manufacturing a tire including a toroidal hard core (3) as well as expanding/contracting means (36-38) inserted at an inner side relative to the core and expandable radially to turn up the carcass around a bead core (e.g. figs. 2-5). Further, the expanding/contracting means is also movable axially. This reference is therefore considered to clearly anticipate claims 1 and 3. As to claim 4, note bladder 38. As to claim 5, note element "37" outside the bladders. As

to claim 6, insofar as the bladder is adapted to engage the carcass inner surface, the bladder is considered to meet the requirements of this claim.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaida et al. (US 4,484,973).

Kawaida et al. disclose a method and apparatus for manufacturing a tire including a toroidal hard core (11) as well as expanding/contracting means (1/13/14) inserted at an inner side relative to the core and expandable radially to turn up the carcass around a bead core (e.g. fig. 3). Further, the expanding/contracting means is also movable axially. This reference is therefore considered to clearly anticipate claims 1 and 3. As to claim 4, note bladder 14. As to claim 5, element "1" outside the bladders are considered to satisfy this claim.

6. Claims 1, 3-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ewing et al. (US 3,051,220).

Ewing et al. discloses a method and apparatus for manufacturing a tire including a toroidal hard core (D) as well as expanding/contracting means (24) inserted at an inner side relative to the core and expandable radially to turn up the carcass around a bead core (e.g. figs. 18-19). Further, the expanding/contracting means is also movable axially. This reference is therefore considered to clearly anticipate claims 1 and 3. As to claim 4, note bladder 76. As to claim 5, the elements on either side of the bladder (esp. fig. 13) are considered to satisfy this claim. As to claim 6, insofar as the bladder is adapted to engage the carcass inner surface, the bladder is considered to meet the requirements of this claim. As to claim 8, the stitcher rollers "31" that also help effect

Art Unit: 1733

expanding/turn-up and are mounted on arms and movable radially and axially as well as at an inner side of the core/drum (e.g. figs. 10 and 18-21) are considered to satisfy this claim.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by FR 1,242,741 to Dunlop.

FR '741 to Dunlop (cited by applicant; machine translation included with this office action) discloses a method for manufacturing a tire including a toroidal hard core as well as expanding/contracting means (2/3) inserted at an inner side relative to the core and expandable radially to turn up the carcass around a bead core (figs. 1-3)

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caretta et al. (US 2002/0011297) or Oswald (US 4,830,781) taken in view of at least one of [FR 1,242,741 to Dunlop, Kawaida et al. (US 4,484,973) and Haase (US 2,951,526)].

Caretta et al. (figs. 1-4) and Oswald (esp. figs. 1 and 4 and col. 4, lines 11-13 and 62-65) each disclose forming a tire carcass by setting a rubber coated cord on a toroidal core from side to side sequentially in the circumferential direction and in which the ends are turned up around beads. Specifics of the means used to effect this turn-up around the bead are not however described. FR '741 to Dunlop, Kawaida et al. and Haase, each as detailed above, disclose means to effect turn-up around the beads of a carcass toroidally formed on a toroidal core, this means including radial expanding means inserted at an inner side of the bead/toroidal core. In view of these teachings of suitable and effective means to effect turn-up of a carcass formed on a toroidal core, it

Art Unit: 1733

is considered to have been obvious to effect the turn-up desired in each primary reference using means radially expandable and inserted at an inner side relative to the bead/core as claimed.


9. Claims 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haase (US 2,951,526) or Ewing et al. (US 3,051,220) as applied above, and further in view of Brown et al. (US 4,199,393) or Niclas et al. (US 3,223,566).

Each of Haase and Ewing et al. utilize bladders to effect turn-up of the carcass around the beads but do not suggest pressing means for pressing the bladders. In this art, however, it is well known and conventional to utilize bladder cages or pushers to press the turn-up bladders to help the turn-up process - Brown et al. (e.g. col. 1, lines 29-37 as well as bladder pusher 50) and Niclas et al. (note bladder cages 11) are merely exemplary. To include such to help push the bladder and thus aid the turn-up would therefore have been obvious and lead to only the expected results.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
September 8, 2006